

Breeding in the Australian Yellow-bellied Sheath-tailed Bat, *Saccolaimus flaviventris* (Peters, 1867)(Chiroptera: Emballonuridae).

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Abstract

Saccolaimus flaviventris pregnancies were almost always restricted to the right uterine horn. This horn first increased in diameter in August, and the maximum enlargement was observed in November. The horn regressed rapidly following parturition. Over the species range the parturient season was between December and mid March. Teats and mammary glands were regressed by the end of May. A pregnant female collected in February had a corpus luteum that was deeply embedded in the right ovary and occupied *ca.* 65 percent of the ovary; the contralateral ovary had numerous large atretic secondary and graafian follicles.

In males, there was no significant difference throughout the year in testis size, weight and position or in epididymis weight; nor was there a significant correlation between these parameters and the depth of the throat pouch - which also showed no significant variation in depth.

Introduction

Emballonurids are widely distributed in the tropical and subtropical regions of the world (Nowak and Paradiso 1983). The family has 11 recent genera comprising about 51 species (Honacki *et al.* 1982). In Australia there are only two genera; *Taphozous* and *Saccolaimus*, although some modern authorities do not recognize *Saccolaimus* as distinct from *Taphozous* (Hill and Smith 1984).

Information on reproductive patterns of emballonurids is not particularly extensive compared to that available on other bat families (Rowlands and Weir 1984) and is limited to several New World species of *Saccopteryx*, *Cormura*, *Peropteryx* and *Centronycteris* (Arata and Vaughan 1970, Flemming *et al.* 1972, Bradbury and Emmons 1974, La Val and Fitch 1977), *Taphozous longimanus* and *T. melanopogon* in India (Gopalakrishna 1955, Brosset 1962, Khaparde 1976, Mokkapati and Dominic 1976, Lekagul and McNeely 1977, Krishna and Dominic 1982, Swami and Lall 1982, Lall and Biswas 1983, Sapkal and Khamre 1983), *T. nudiventris* in Pakistan (Roberts 1977), *T. mauritanus* in Zaire (Kingdon 1974), the Asian *Saccolaimus saccolaimus* (Medway 1978), *T. georgianus* (Kitchener 1973) and *T. hilli* in Australia (Kitchener 1976). There is no study on the reproduction of Australian *Saccolaimus*, apart from the single observation of

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